



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,654	02/04/2005	Shigeru Nemoto	KITO2.005APC	1250
20995 7590 08/15/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER ANDERSON, MICHAEL J	
			ART UNIT 3767	PAPER NUMBER
			NOTIFICATION DATE 08/15/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
cOAPilot@kmob.com

Office Action Summary

Application No.

10/523,654

Applicant(s)

NEMOTO, SHIGERU

Examiner

Mich  el J. Anderson

Art Unit

3767

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C.   133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C.   119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C.   119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/8/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The present communication responds to the Amendment of 05/24/2007. By this communication, claims 1, 7 and 8 were amended to fix means plus function language and to make claims 7 and 8 depend from claim 1. New claims 9-12 were added. Claims 2-6 were cancelled. The amendments did not add new matter. Claims 1 and 7-12 are pending. The rejection(s) are as follows.

Information Disclosure Statement

The references filed 01/08/2007 have been considered, and will be listed on any patent resulting from this application since they were provided on a separate list in the Information Disclosure Statement (IDS) Form PTO/SB/08 in compliance with 37 CFR 1.98(a)(1).

Response to Arguments

Applicant's arguments with respect to claims 1 and 7-12 have been considered but are moot in view of the new ground(s) of rejection.

With respect to claims 1, 7 and 8 which were rejected under 35 U.S.C. 102(b) as being anticipated by Polaschegg (U.S. patent # 4966579) (Polaschegg), applicant argues that "Polaschegg does not teach or suggest that "the open or close interlock mechanism has a cam member supported rotatably and having a concave portion in a surface thereof with which the first press member and the second press member

engage" and that "the first and second press members release the blocking of the first and second syringe tubes by their trailing ends being fit in the concave so that one of the syringe tube is released after the other syringe tube is blocked" as recited in amended claim 1".

The office notes that amended claim 1 now includes the structural elements of cancelled claims 3-6 which were rejected under 35 U.S.C. 103(a) above. Therefore, amended claims 1, 7 and 8 are **rejected** under 35 U.S.C. 103(a) as being unpatentable over Polaschegg in view of Sugawara (JP patent # 3292964) (Sugawara) and further in view of Lamadrid (U.S. patent # JP 4397642) (Lamadrid) as outlined below under the 35 U.S.C. 103(a) rejections.

With respect to claims 3-6, applicant argues, "Polaschegg does not teach all of the claim elements. Neither Sugawara nor Lamadrid teach how to modify the teaching of Polaschegg to address the deficiencies described above". However, applicant previously cancelled claims 3-6, making this a moot argument.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polaschegg in view of Sugawara (JP patent # 3292964) (Sugawara) further in view of Lamadrid (U.S. patent # JP 4397642) (Lamadrid).

With respect to claim 1, Polaschegg discloses in figure 1, a patient tube (23), a plurality of syringe tubes (18-21), a tube connecting means (27), a syringe hold member (3-4), a plurality of syringe drive mechanisms (3-4 contains syringe infusion pumps), a plurality of tube block mechanisms (7-8), and interlock control means (17). However, Polaschegg does not explicitly disclose a press slider member supported slidably and the first press member and the second press member formed to be integral. Sugawara teaches a pivotal first press member, a first hold member, a pivotal second press, a second hold member and the first press member and the second press member formed to be integral as shown in figures 5 and 6 to restrict flow from one or the other inputs. Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to modify the liquid injection device of Polaschegg as taught by Sugawara in order to have a tube clamping mechanism. Additionally, Polaschegg does not disclose an interlock mechanism with a crank member supported pivotally on its own trailing end, a first link member for connecting a leading end of the crank member to the first press member and a second link member for connecting the leading end of the crank member to the second press member. Lamadrid teaches an interlock mechanism (Figure 2) with crank member supported pivotally on its own trailing end (22 and 83), a first link member for connecting a leading end of the crank member to the first press member (26 and 82) and a second link member for connecting the leading

end of the crank member to the second press member (#26 and 82) to provide an automatic shut off. Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to modify the liquid injection device of Polaschegg as taught by Lamadrid in order to have an additional patient safety mechanism.

With regard to new claims 7 Polaschegg, Sugawara and Lamadrid discloses the injection device as for claim 1 above and further discloses an interlock control means (17 and column 4, lines 5-10) and syringe drive mechanism (3-4).

With respect to claim 8, Polaschegg, Sugawara and Lamadrid disclose the injection device as for claim 1 above and Polaschegg further discloses a one-way valve (27 and 14).

With regard to new claims 9 Polaschegg, Sugawara and Lamadrid discloses the injection device as for claim 1 above and further discloses wherein the cam member has another concave portion in which both of the first and second press members are simultaneously located so that the first and second syringe tubes are released from blocking simultaneously.

With regard to new claims 10 Polaschegg, Sugawara and Lamadrid discloses the injection device as for claim 1 above and Polaschegg further discloses it comprising a release sensor for sensing both of the first and second press members are fit in the another concave portion (column 4, lines 5-10).

With regard to new claims 11 Polaschegg, Sugawara and Lamadrid discloses the injection device as for claim 7 above and Polaschegg further discloses wherein the cam

member has a convex which is sensed by the first and second block sensors (column 4, lines 5-10).

With regard to new claims 12 Polaschegg, Sugawara and Lamadrid discloses the injection device as for claim 7 above and Polaschegg further discloses wherein the first press member has a convex which is sensed by the first block sensor and the second member has a convex which is sensed by the second block sensor (column 4, lines 5-10).

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Anderson whose telephone number is (571) 272-2764. The examiner can normally be reached on M-F 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin C. Sirmons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J Anderson
Examiner
Art Unit 3767

MJA
8/1/2007

KEVIN C. SIRMONS
SUPERVISORY PATENT EXAMINER

